

FIG 1

FIG 1 is a schematic diagram of a network structure. The network consists of nodes A through I and their connections to 'ST' (Storage Tank) blocks. The connections are as follows: Node A is connected to Node B and Node C. Node B is connected to Node E. Node C is connected to Node E. Node E is connected to Node D, Node F, and Node G. Node F is connected to Node H and Node I. Node G is connected to Node H. Node H is connected to Node I. Each node is associated with an 'ST' block, except for Node A which is not. An arrow points to the link between Node A and Node B, labeled 'LINK AB'.

STATUS TABLE ST

NODE	LINK	STATUS
A	AB AC	Y Y
B	BA BC BE	Y Y Y
C	CA CB CD	Y Y Y
D	DC DE DE	Y Y Y
E	EB ED EF	Y Y Y
F	FD FE FI	Y Y Y
G	GE GH	Y Y
H	HE HC	Y Y
I	IF IH	Y Y

]-RSP

]-RSP-E

]-RSP-G

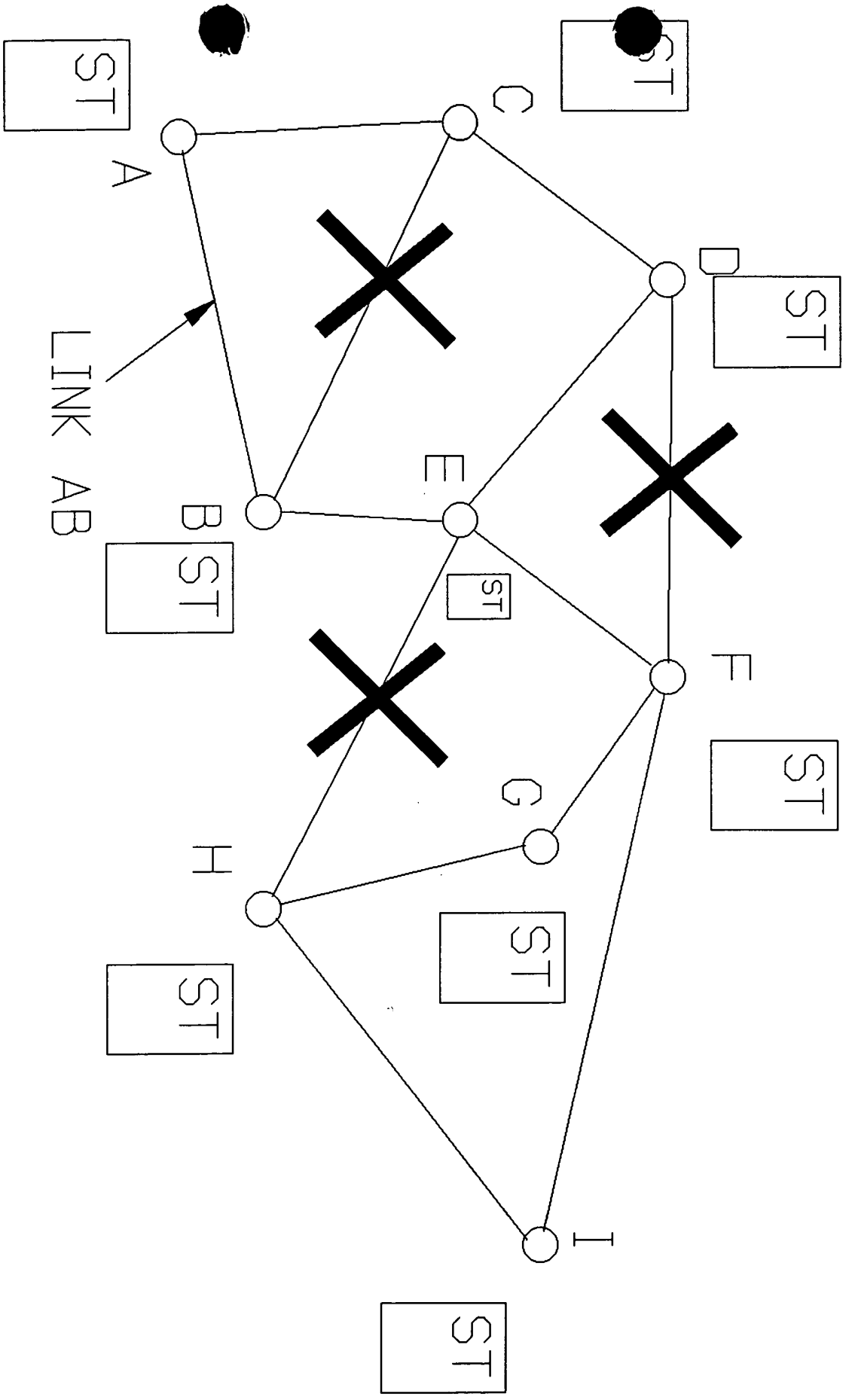
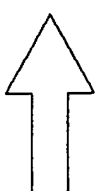
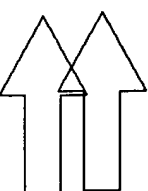
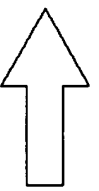
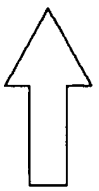
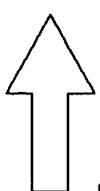


FIG. 3 is a schematic diagram of a network topology showing nodes A through I, some with 'ST' labels, and three large 'X' marks indicating failures or disconnections. An arrow points to the link between A and B labeled 'LINK AB'.

FIG 3

FLAG	NODE	LINK	STATUS
	A	AB AC	Y
	B	BA BC BE	Y N Y
	C	CA CB CD	Y N Y
	D	DC DE DE	Y Y N
	E	EB ED EF EH	Y Y Y N
	F	FD FE FG FI	N Y Y Y
	G	GF GH	Y Y
	H	HE HG HI	N Y Y
	I	IF	Y

STATUS
TABLE
ST



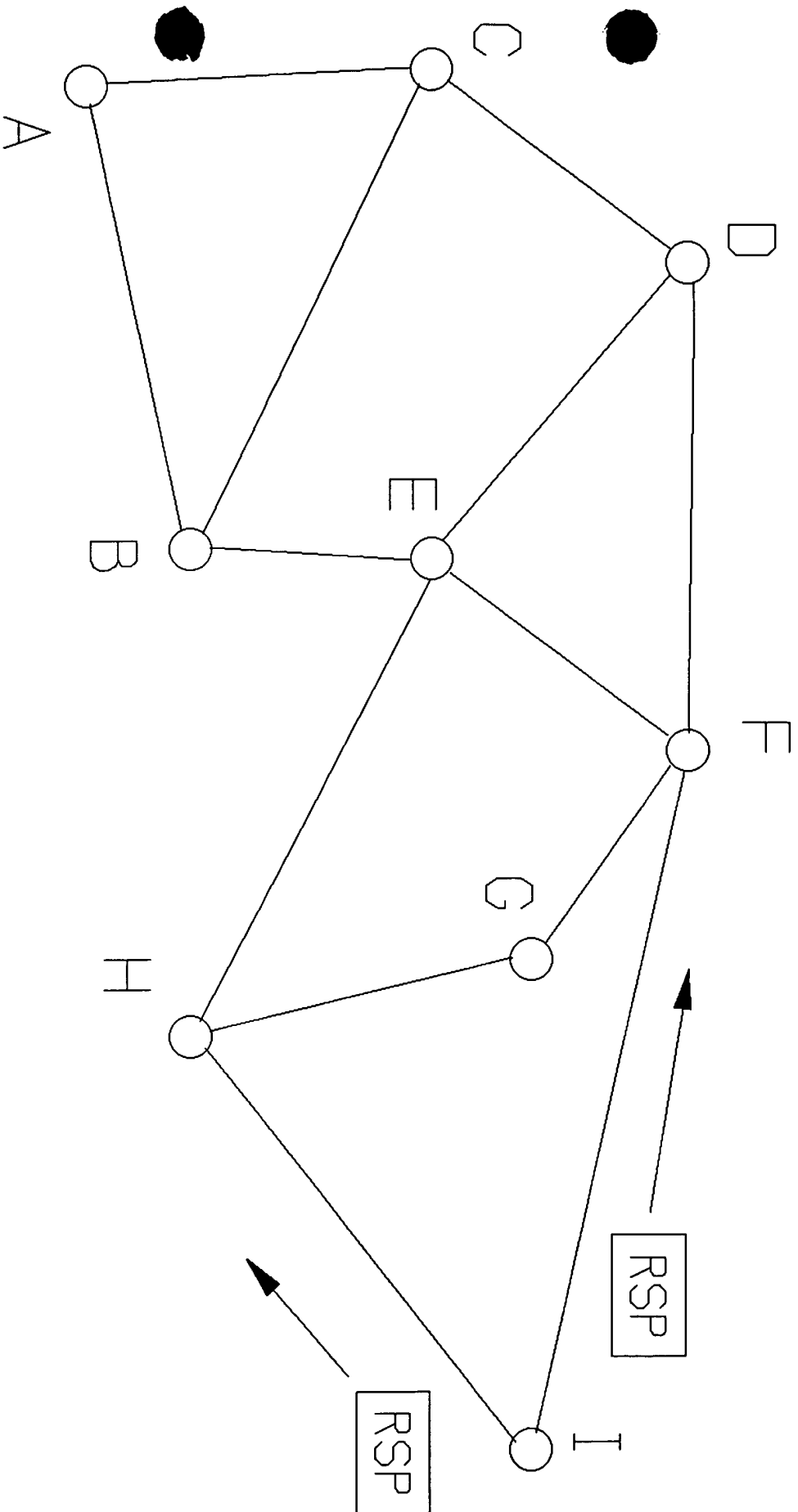


FIG. 1 is a schematic diagram of a network system. The network system includes a central node (E) connected to multiple peripheral nodes (A, B, C, D, F, G, H, I). The central node (E) is connected to nodes A, B, C, D, F, G, H, and I. The peripheral nodes are connected to the central node (E) and to each other. The network system is shown in a schematic diagram.

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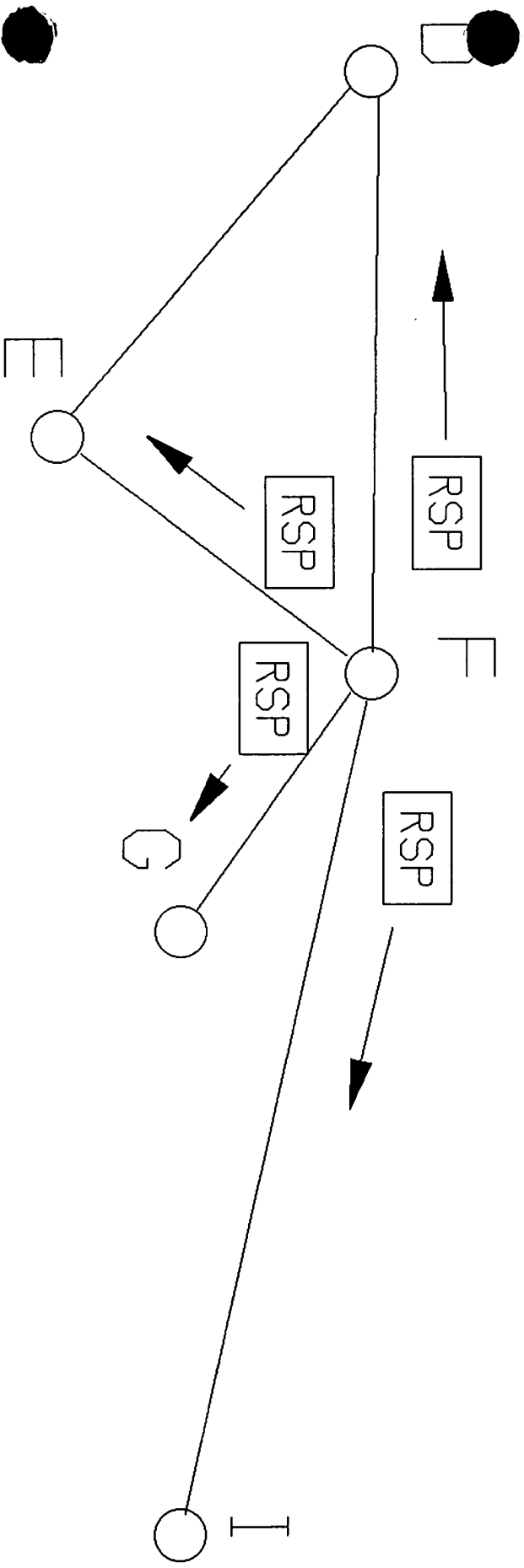


FIG. 6

NUMBER

2

0

1

ρ

INCREMENTS

FIG. 7

FIG. 7

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE >0	0	ACCEPT INCOMING
SEQUENCE No.		
CONTENT		

Fig 8A

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE		DISCARD INCOMING
SEQUENCE No.	SAME	
CONTENT	X DIFF	

Fig 8D

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE		ACCEPT INCOMING
SEQUENCE No.	>X	
CONTENT		

Fig 8B

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE 0		ACCEPT INCOMING
SEQUENCE No.	SAME	
CONTENT		

Fig 8E

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE SAME	SAME	DISCARD INCOMING
SEQUENCE No.	SAME	
CONTENT	SAME	

Fig 8C

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE		DISCARD INCOMING. PROPAGATE COPY FROM TABLE.
SEQUENCE No.	NEGATIVE	
CONTENT		

Fig 8F

Fig 8

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE		ISSUE FRESH RSP
SEQUENCE No.	NEG	
CONTENT		
OTHER	RECIPIENT WAS ORIGINATOR	

File 86

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE		ISSUE FRESH RSP
SEQUENCE No.	X	
CONTENT		W/ X + 1 AS SEQ No.
OTHER	RECIPIENT WAS ORIGINATOR AND SEQ. NO. OF LAST WAS NEG	

File 84

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE	0	ISSUE FRESH RSP
SEQUENCE No.		
CONTENT		
OTHER	RECIPIENT WAS ORIGINATOR AND SEQ. NO. OF LAST WAS NEG	

File 84

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE		
SEQUENCE No.		
CONTENT		
OTHER		

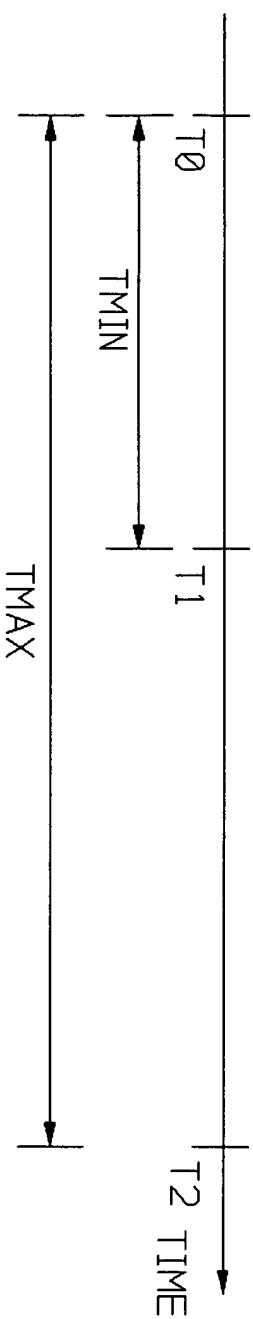
INCOMING RSP	STORED RSP	ACTION TAKEN
AGE		
SEQUENCE No.		
CONTENT		
OTHER		

INCOMING RSP	STORED RSP	ACTION TAKEN
AGE		
SEQUENCE No.	NEGATIVE	
CONTENT		
OTHER		

File 84

RSP

GENERATION



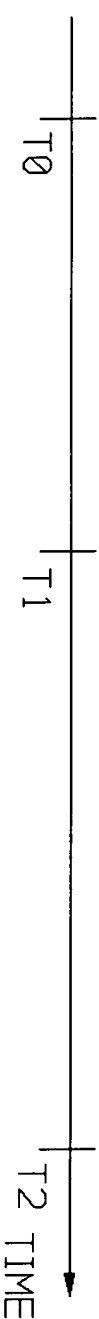
1. IF EVENT OCCURS WITHIN TMIN, WAIT UNTIL T1 TO ISSUE RSP, SHIFT T0 TO T1.
2. IF EVENT OCCURS BETWEEN T1 AND T2, ISSUE RSP IMMEDIATELY. SHIFT T0 TO T1.
3. IF NO EVENT OCCURS, ISSUE PERIODIC RSP AT T2.

RSP

GENERATION

Next RSP

GENERATION



SHIFT

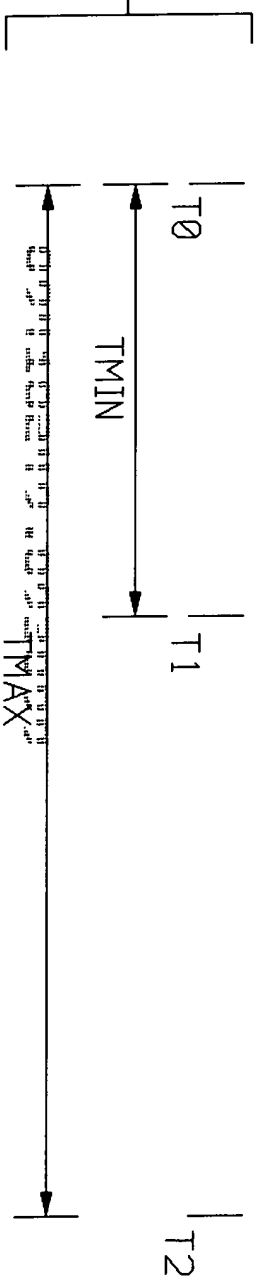
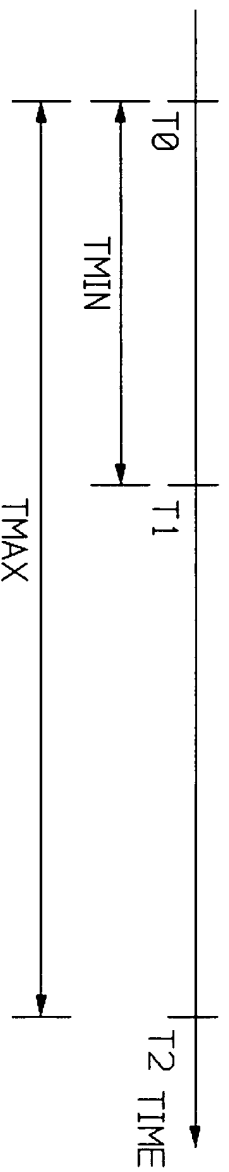


Fig 9

RSP

GENERATION



1. IF EVENT OCCURS WITHIN T_{MIN} , WAIT UNTIL T_1 TO ISSUE RSP. SHIFT T_0 TO T_1 .

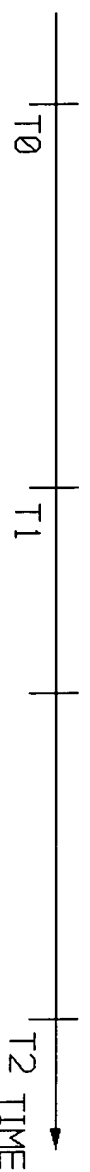
2. IF EVENT OCCURS BETWEEN T_1 AND T_2 , ISSUE RSP IMMEDIATELY. SHIFT T_0 TO EVENT.

3. IF NO EVENT OCCURS, ISSUE PERIODIC RSP AT T_2 .

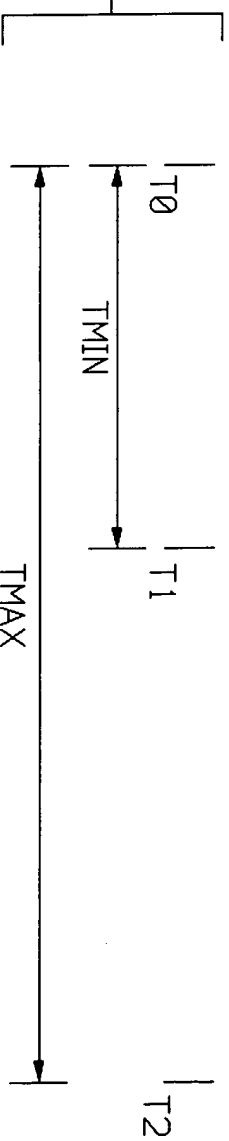
RSP

GENERATION

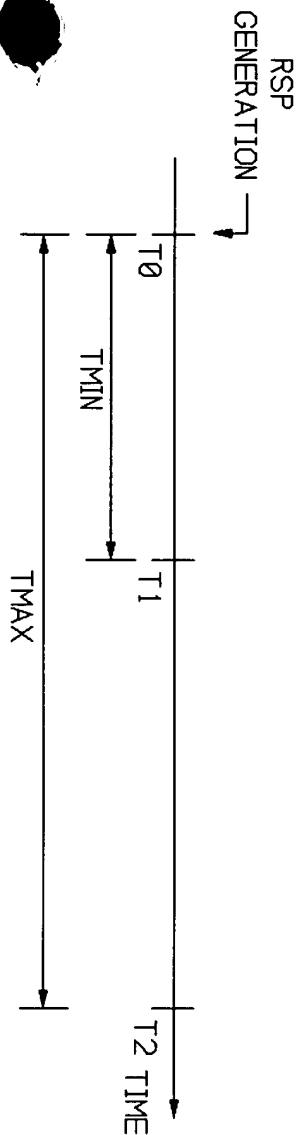
Next RSP
GENERATION



SHIFT



FILE 10



1. IF EVENT OCCURS WITHIN TMIN, WAIT UNTIL T1 TO ISSUE RSP. SHIFT T0 TO T1.
2. IF EVENT OCCURS BETWEEN T1 AND T2, ISSUE RSP IMMEDIATELY. SHIFT T0 TO EVENT.

3. IF NO EVENT OCCURS, ISSUE PERIODIC RSP AT T2.

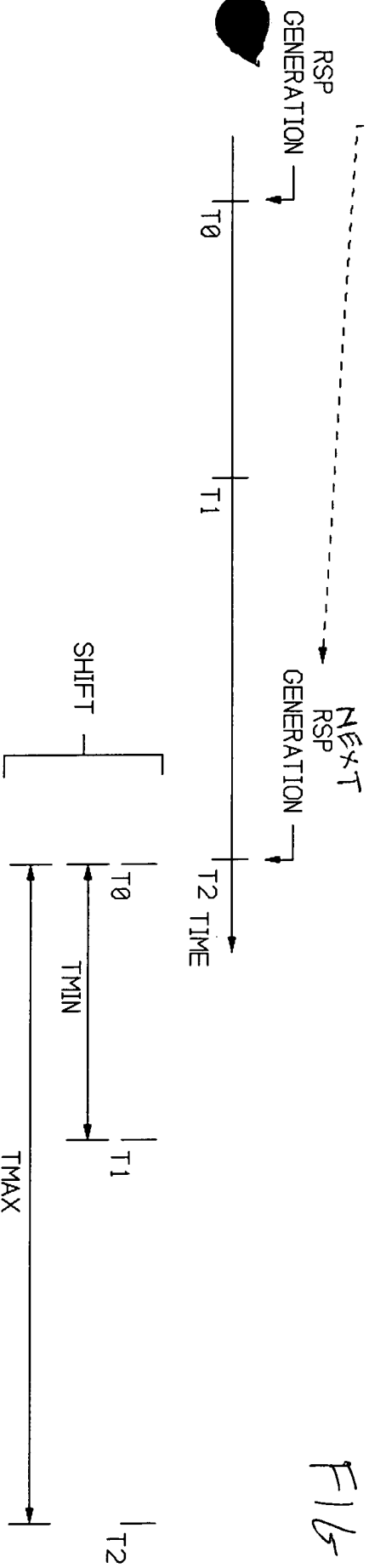


Fig 11